

Tiina Wright

Development of a functional level IT strategy for the case company

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<p>The purpose of the Master's thesis was to develop a functional level IT strategy for a Finnish start-up company and propose an implementation plan and Key Performance Indicators to follow up the objectives of the strategy and unit performance. The case company operates in global environment marketing, selling and distributing branded mobile devices.</p> <p>The research was conducted as a case study and due to the lack of existing functional IT strategy, only qualitative research methods were used. They consisted of gaining understanding of the current state of the company, the Corporate level strategy, and the objectives of the IT unit. This information set the base for the functional strategy development.</p> <p>The Current State Analysis provided an understanding of the case company's IT legacy, which changed the initial requirement of a pure start-up strategy development to a three-level functional IT strategy: short-term transformation strategy, mid-term strategy and long-term strategy. The business launch and growth targets were the foundation for the Corporate strategy, which in turn set the requirements for the functional level strategies, including IT. The researcher investigated strategy concepts, best practises and trends in the changing digital environment. As no standard IT strategy suitable for the case company was available, development of a custom made functional IT strategy was needed. Following the strategy creation, an implementation plan and Key Performance Indicators were also developed and proposed.</p> <p>As a result, the author has created a strategy for the case company's IT unit. The author has additionally produced an implementation plan and suitable Key Performance Indicators with which the performance of the IT unit can be measured and leveraged with the Corporate objectives. Going forward, the author recommends regular reviews of the functional strategy and establishing agile ways of operating to remain competitive and responsive to the changing business requirements.</p>	
Keywords	Strategy, management, IT

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Acronyms

AI	Artificial Intelligence
CEO	Chief Executive Officer
CDO	Chief Digital Officer
CFO	Chief Financial Officer
CIO	Chief Information Officer
CRM	Customer Relationship Management
DevOps	Development-Operations. An Information Technology practise that unifies development and operations
ERP	Enterprise Resources Planning system
HCM	Human Capital Management
HR	Human Resources
IT	Information Technology
ITIL	Information Technology Infrastructure Library. A set of detailed practices for IT service management (ITSM) that focuses on aligning IT services with the needs of business
KPI	Key Performance Indicator(s)
OEM	Original Equipment Manufacturer
RPA	Robotic Process Automation
SIAM	Service Integration and Management
VR	Virtual Reality

1 Introduction

The case company is a Finnish investment company founded in 2016. The company has ~500 employees globally, including employees of their OEM (Original Equipment Manufacturer) partner company's subsidiary. Internally, the case company and the OEM's subsidiary are managed as one, although the external financial reporting is done individually due to separate legal ownerships.

The case company is - together with the partner - marketing, selling and distributing branded mobile devices.

1.1 Business problem, objective and outcome

Business problem: A start-up company's IT department is lacking short-term and long-term IT strategy. Without a strategy, there is a risk of IT activities as well as IT goals and targets deviating from organisation level strategy, ultimately resulting in negative impact to company performance.

Objectives: To develop a Functional level IT strategy for the case company. The research will answer the following research questions:

- What is the current state of the case company strategy?
- What is the current state of the case company IT unit?
- What are strategy concepts?
- What are the best practices for an IT strategy?
- How does digitalisation impact strategy creation?
- What kind of IT strategy is suitable for a start-up business?
- What kind of IT strategy would fulfill the needs of the case company?
- How should the IT strategy be implemented and monitored in the case company?

The objectives also include the Functional strategy implementation plan, as well as a proposal for the Key Performance Indicators.

Outcome: A functional level IT strategy including an implementation plan and KPIs (Key Performance Indicators), with which the suitability of the strategy and IT unit operations can be measured.

1.2 Research scope

In this research, the Business and Corporate level strategies are touched upon but the focus is on the unit level IT strategy.

Corporate level strategy is explained as it is important to understand what the organisation long term targets are. The unit level IT strategy will be aligned to the Corporate strategy and the unit level strategy formation is covered in detail as well as the recommended implementation plan and KPIs.

The case company's IT unit works closely with the OEM partner's subsidiary's IT unit. The focus of the research is the strategy creation for the case company and the partner's subsidiary, both of which the case company's IT unit will serve. However, the manufacturing partner's subsidiary's IT unit is focusing on other activities and is a short-term setup and will thus be outside of the research scope.

The OEM partner's operations are not part of the research.

The IT unit level KPIs are in scope, however the individual level employee objectives are excluded.

Risk Management is excluded from the research.

2 Research Design

The research objective is to create a unit level IT strategy for a start-up company. Explaining how the functional IT strategy links to the Corporate strategy and why a functional level strategy is needed are explained in Chapter 3.

The research starts with the Current State Analysis to clarify the position of the case company being a start-up, i.e. there is no existing IT strategy to improve. It is however important to explain in the beginning what the case company's business model is to be able to investigate suitable strategy concepts in the Conceptual Framework part. Additionally, the legacy IT elements are covered. The Current State Analysis further covers the case company's IT requirements and the drivers behind an IT strategy.

The Conceptual Framework consists of a study on strategy concepts, exploring the best practises for start-up strategies and the IT trends which may impact the strategy creation. Following rapid global digitalisation phenomenon leaves the options for a standard IT strategy application short - there are no such strategies available which could be applied in the case company as such.

Therefore, the strategy creation in the Strategy Formation section is based on the research carried out, and the IT strategy is custom created on top of certain strategic concepts yet considering the requirements as explained in the Current State Analysis.

The Strategy Formation section additionally presents the implementation plan including communication suggestions, and the recommended Key Performance Indicators and their implementation and follow up processes.

The research design is illustrated in Figure 1 below.

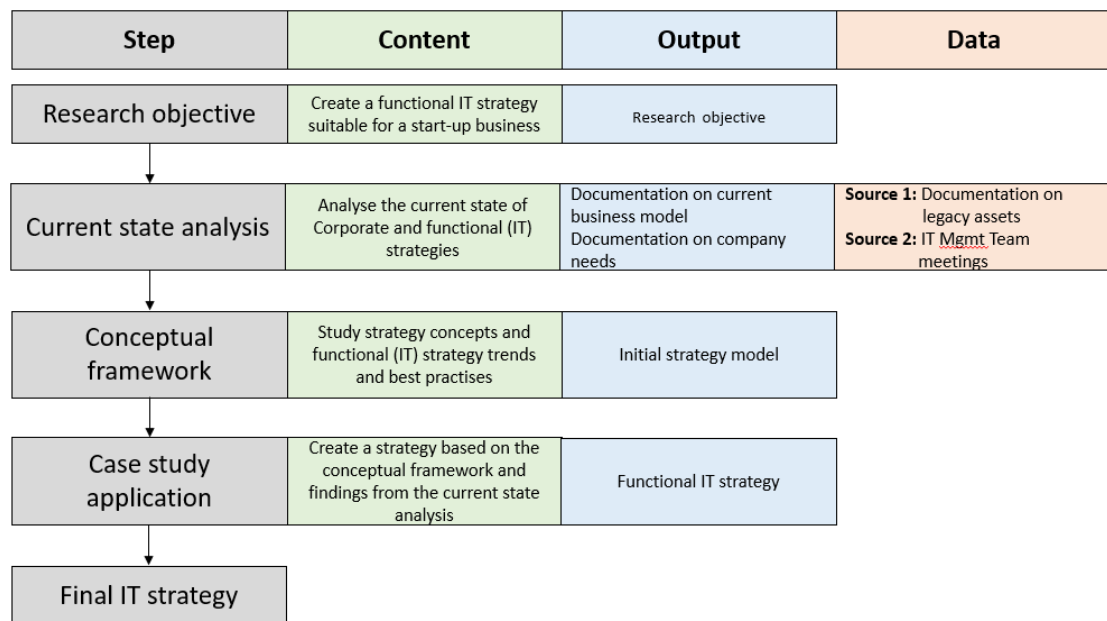


Figure 1. Diagram of the research design

3 Current state analysis

The following chapter includes discussion of well-known strategy concepts and covers the views of several researchers. The Corporate level strategy is explained briefly, as well as the Functional level strategy dependence to the Corporate strategy. Then, the background of the case company and its business model is elaborated on and last, the current state of the case company IT is explained.

3.1 Case company Corporate strategy

Theorists define strategy in different ways. Henry Mintzberg defines strategy as a pattern in a stream of decisions, Alfred D. Chandler believes strategy is the determination of the long-run goals and objectives of an enterprise, the adoption of courses of action and the allocation of resources necessary for carrying out these activities, and Michael Porter holds a view that competitive strategy is about being different and deliberately choosing different sets of activities to deliver a unique mix of value (Johnson et al., 2013, p.3).

It is Porter's definition that will be the guide in this research.

Strategy can be divided into three main levels. First, there is a Corporate strategy which is about the overall scope of companies. The second level is the Business strategy, which is the way companies compete in their particular markets. The third level is Operational or Unit level strategy (Johnson et al., 2013, p.5-6).

In this research, the Business and Corporate level strategies will be touched upon, but the focus will be on the unit level IT strategy.

The Corporate level strategy in the case company had been created by the Leadership Team prior to the closure of the Business transaction with the Seller. The strategy was communicated across the organization immediately after the Business transaction was completed.

The case company's Corporate strategy statement is following:

We are a collective of passionate and experienced people with one thing in common; we believe that technology can enhance and improve the lives of billions of people around the world.

We want to create an improved and more personal user experience. To do that, we've joined forces with visionary industry leaders, so we can share our ingenuity, experience and expertise to find innovative, new ways to connect.

Through research, development and imagination, we endeavour to develop new products that are engineered to benefit humans, and humanity. Together, we aim to enhance the lives of our

customers, create new, diverse, opportunities in global communication and bring the people of this big planet just a little closer together.

Corporate strategy statement sets the starting point for IT unit level functional strategy planning. As noted by Catlin, a functional strategy can only be successful if it is fully integrated with the overall corporate strategy, as without this deep alignment, any subsequent intervention is bound to fall short (Catlin et al., 2015, p.10).

The position of Information Technology in the case company is to be part of planning, decision making and monitoring of the ongoing activities at the Leadership level. This way, the options of technology utilisation would be included in the daily operations of running the company.

A separate unit level IT strategy is seen necessary as IT is recognized of potentially increasing the company value with technological choices and the operating model it will create. IT is considered as a separate functional area with its own goal of being a technology frontrunner in the industry. For this setup to work it would be important to align IT strategy tightly with the corporate level strategy from the start.

3.2 Case company background and the business model

The case company was established with an aim to acquire assets and licenses and to partner with the chosen OEM company to operate a new business model in a global environment.

In December 2016 a Business transaction took place where a large international manufacturing company ("Buyer 1") acquired technology product related assets and a production factory from a large technology company ("Seller"), and made an OEM agreement with the case company ("Buyer 3"). The case company made an exclusive distribution agreement with the OEM company's subsidiary ("Buyer 2"). In addition, the case company acquired patents and other Intellectual Property from the Seller and entered a brand licensing agreement with another known technology company ("Brand owner").

These transactions disrupted a traditional business model, where everything from manufacturing to sales, marketing and distribution is handled in-house by a single company, by introducing a new model based on several partnerships.

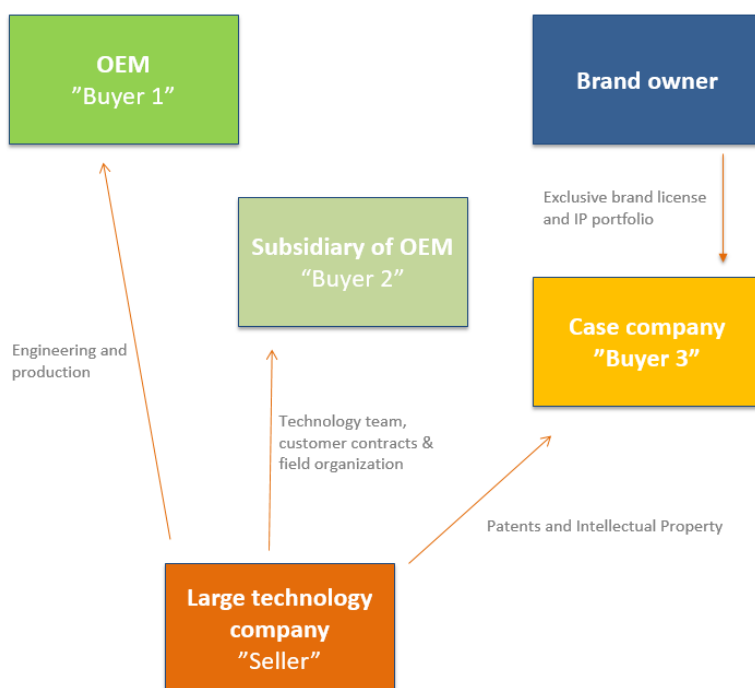


Figure 2. Illustration of the Business transaction

While the partnership model is a new way of operating in mobile technology business, some strategic advantages can be identified which support the new business model. These advantages are supported by Barney's (2013) statement:

"the competitive advantage and superior performance of an organisation are explained by the distinctiveness of its capabilities"

(Johnson et al., 2013, p.49).

The combination of carefully selected partnerships, as well as the internal assets, are believed to offer capabilities which in turn will result in competitive and distinct market advantages.

During the autumn of 2016 the company registrations had taken place in the countries where the case company intended to operate, assets had been evaluated and the business model as well as company policies had started to form.

The company's physical assets are office spaces in a few locations (otherwise rented), a data centre for hosting the acquired IT systems and applications, and patents. The financial asset is private funding until the business starts to operate and generates profits. The human assets are the Board, management, employees, partners, suppliers and customers. Additionally, the acquired sales, marketing and logistics channels, and the customer base are important assets.

In order to create an efficient, profitable and hard to imitate operating model, it is important to recognise that the efficiency of physical and financial resources, as well as the people, depend

on the systems and processes by which they are managed, and their relationships and collaboration. Also the adaptability, innovative capacity, the relationships with the customers and suppliers and the experience and learning about what works are what does not impacts companies' efficiency (Johnson et al., 2013, p.50).

Therefore, the aim of the case company was to create a unique operating environment and unit level strategies to support the operations. The managers from different functions in the case company had united with the leadership team prior to the Business transaction to discuss and form the Corporate strategy, after which the unit leaders were requested to start planning the units' contribution towards the common Corporate level targets. These activities set the path for orchestration of the operations, an essential element in order to achieve an efficient organisation.

3.3 Current state of IT in the case company

As part of the business transaction, the OEM's subsidiary acquired the technology and manufacturing related IT landscape from the Seller. The IT landscape had been custom-developed over many years under the previous ownerships and covered everything from infrastructure, connectivity, system architecture, applications, tools and a data centre to laptops and personnel.

The legacy environment was needed for starting up the business without disruption, but it had been decided to take into use the business-critical systems only and gradually start replacing the old tools and technology with modern solutions supporting the business and the new business model, excluding manufacturing. This transformation and the subsequent years in the operations is the focus of the research, leaving the legacy operations outside of the research scope.

Systems

Most of the acquired systems and tools had been custom configured and created in-house to support a manufacturing business and a made-to-order model Supply Chain Management (SCM). This type of system environment is no longer needed as the manufacturing environment had been acquired by the OEM partner and the SCM model would be changing to made-to-stock.

The systems had been cleared from all legacy data prior to the transaction closure and the IT related contracts and licenses had been re-negotiated for short term use under the new owner, the OEM's subsidiary.

There had been more than 200 systems and tools in use prior to the business transaction and already it was seen that not all of them would be needed by the buyers.

Costs

The data centre hosts company owned servers where all the legacy tools and applications are installed. Most of the data centre related maintenance activities are outsourced and this setup carries a high cost for which other alternative and lower cost operations need to be identified and implemented.

The employee related operational expenditure is relative high considering the low number of employees. The employees are highly experienced and competent, and therefore earn high salaries. This competence is needed for setting up the operations. Additionally, there is a need for a high number of consultants with specialist skills during the first year.

The software licenses of the transferred and operational systems had been re-negotiated for short term use, however they set dependencies for the transformation schedule. Short-term contracts are typically more expensive than long-term contracts. It is the aim of the case company to discontinue majority of the contracts and implement replacement tools as quickly as possible.

People

The personnel who transferred as part of the asset deal to Buyer 2 have thorough system and process understanding and their role is to ramp up the legacy system environment for the case company and the OEM's subsidiary so that in the customers' eyes the business would continue without disruption.

As stated earlier, the employees are highly skilled and their role is to ensure the IT transformation. They are responsible for contracting consultants and supervise their work. Therefore it is important that the IT employees understand the IT strategy as it sets objectives for the IT unit to fulfil the business expectations. The newly hired IT employees possess similar skills, although focusing on Cloud technology.

4 Conceptual framework

Chapter 4 begins with a discussion about strategy concepts and their characteristics. The Chapter further progresses to assess the drivers for a unit level IT strategy and goes deeper into the examination of different levels of strategies in organisations, before analysing the available trends and best practise models. The challenges and opportunities of digitalisation are also covered in this Chapter.

4.1 Strategy concepts

The word “strategy” comes from two Greek words: Stratus (Army) and Agein (to lead). Strategy is described by many with military terms, including Sun Tzu, believed to be a military strategist (Sun Tzu, 1988). Strategy can also be defined as “a plan of action designed to achieve a long-term or overall aim”, “the art of planning and directing overall military operations and movements in a war or battle” and “a plan for directing overall military operations and movements” (Oxford University Press, 2018).

There are different schools in strategical analysis and the definitions have different focus areas. However, three common factors can be identified in different strategical views (Johnson et al., 2013, page 5).

Long term expectations

The first one states that strategy is considered as having a long-term nature. The three-horizons framework suggests that companies should comprise three types of business or activity, defined by their ‘horizons’ in terms of years: Horizon 1 consists of the current core activities, extending and defending them. Horizon 2 concentrates on building new and emerging businesses and Horizon 3 focuses on creating new viable options for the future (Johnson et al., 2013, page 5).

The Horizon view is demonstrated in Figure 3.

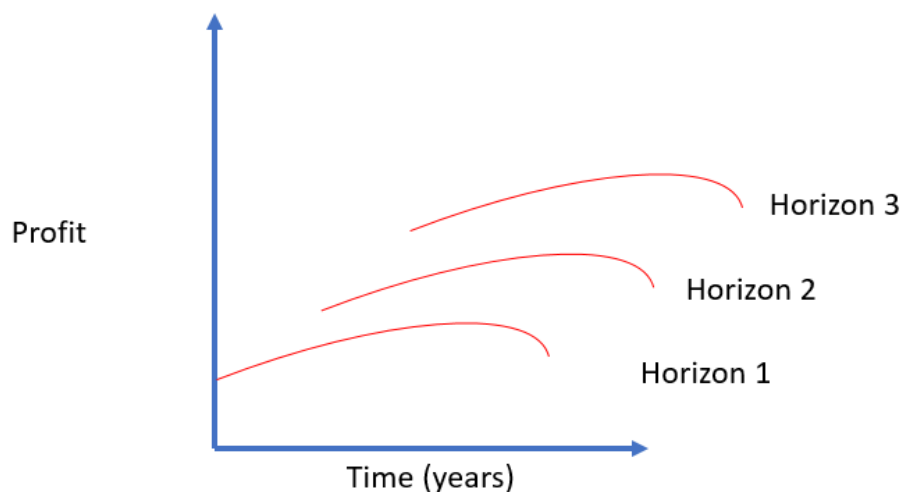


Figure 3: The three horizons of strategy (Johnson, G., et al. 2015, p. 5)

Direction

The second uniting view is that strategy should provide direction for the activities. The outcome of the horizon definitions sets the direction for the company and it can then be converted into

more practical objectives for the operations. The objectives often have KPIs related to them with which the company course can be measured and evaluated (Johnson et al., 2013, page 5).

Organisation

The third view is the idea of strategies concerning organisations, with their internal employees with different diverse, competing opinions, and views of what activities should be carried out. Secondly, there are the external stakeholders; how to manage the network of partners, customers and other important relationships outside of the organisation (Johnson et al., 2013, page 5).

The strategy is created based on the chosen direction and communicated across the organisation.

The future of progress

There are numerous publications relating to strategy and strategy has been in the interest of many researches. As strategy is only concerned with future activities and events, a significant element is to discuss what the future of progress is.

Peter Thiel writes about this subject with an interesting approach. The progress can take one of two forms: horizontal extensive progress meaning copying things that already exist and have been proven to work, or vertical intensive progress, which means innovating and doing new things that do not yet exist. The horizontal progress is easy to imagine due to its familiar elements, but the vertical one is more difficult as it requires doing something nobody else has ever done (Thiel, 2014, p.6-7).

The way the case company's IT unit sees the future of progress is vertical. The objective is to explore different ways of operating, utilizing new digital technologies and ways of working. However, it is important to note that as the future is full of uncertainties there has to be elements from the familiar side also. Hence the functional IT strategy should be a combination of both – the familiar horizontal aspect to form a solid foundation for the business launch and operations, and the unfamiliar vertical aspect to explore new opportunities and an aim to create something new. This in practice means the IT unit's strategy should include building a foundation with familiar technology pieces that have been in use in other companies, thus lessening the risk exposure at the most critical time for the business, the launch. The strategy would also cover an element of the exploration and innovation, which are the Horizon 3 activities in Figure 3.

According to Thiel, "in business equilibrium means statis and statis means death. If your industry is in a competitive equilibrium, the death of your business will not matter to the world; some other undifferentiated competitor will always be ready to take your place." If, on the other hand businesses can create and follow a unique strategy and create unique and inventive functional level strategies or objectives, they are more likely to survive (Thiel, 2014, p.34). This approach also supports the case company's desire to compete.

4.2 Targets and drivers of an IT strategy

The case company's IT unit wants to stand out and compete with their chosen technology, personnel and operative model. The long-term objective is to be able to act so fast that the competitors will not be able to compete against them. The case company's IT strategy has to be so unique that it is difficult to copy and too fast in its actions to be challenged.

The competitive advantages do not only arise from agility, but also from the way data is handled. Collecting and analysing customer related data provides opportunities to identify new trends and target customer groups. Additionally, the behaviour of the customers can provide valuable insight which can be utilized in many ways. In today's digital world the amount of data is enormous and intelligent ways of handling it can provide companies opportunities which are yet to be discovered. Digitalisation acts as an enabler.

Additionally, it is necessary to understand the purpose of the unit level strategy and its dependencies to the corporate level strategy. Understanding the organization and its targets is the key. The Corporate level strategy sets the goals and targets for the company and as a sub-function IT strategy needs to be aligned with it.

The IT strategy should be used to assist the organization to reach its goals, but at the same time IT should be looked at as an investment. Technology enables organizations' functions with speed, and it provides opportunities for acting in agile manner in responding to market conditions.

Strategy drivers

Corporate strategy sets drivers for the functions and company performance. The drivers can be considered as catalysts that make things happen, and they need to be clearly defined and communicated. The main strategy drivers are (Ducoff, 2014):

1. **Culture:** The collective behaviour of the company that drives each outcome
2. **Sense of urgency:** The energy that drives performance and growth
3. **Critical numbers:** Numbers that, if changed, have a profound impact on the company
4. **Information flow:** Top down, bottom up — everyone is on the same page and knows the score
5. **Teamwork:** The unified energy of the company that gets the job done
6. **Innovation:** Keep your thinking "outside the box"
7. **Systems:** The procedures and structure to produce the right results
8. **Accountability:** Delivering what is promised, when it is promised

The success of the drivers can be measured, and they require united leadership and communication to function as intended. It is particularly important to consider the drivers in the case company's start-up environment, as the foundation for the operations can make or break the company's future. The core of the short term strategy is formed around the two most important Corporate objectives: successful setup of the new business model and sales enablement.

4.3 Strategy levels and trends

Strategy is typically seen as consisting of three levels in the organizational hierarchy: Corporate, Business and Functional. The Corporate level strategy involves the entire organization, the Business level strategy concerns different divisions or centres of activities, and the Functional level refers to organizational departments such as IT, HR and Marketing (Johnson et al., 2013, p.6-7).

The fundamental difference between these levels is the leadership they involve. Corporate strategy requires Executives or Advisory Boards and Top Management involvement whilst Functional strategy involves persons within specific functions, as demonstrated in Figure 4. Corporate strategy serves as a guide for both Business and Functional strategies and they should be tightly aligned.



Figure 4: The three levels of strategy

Since strategies are created for achieving objectives, Corporate, Business and Functional strategies differ in the types of objectives they target. Corporate objectives typically focus on bottom line results such as revenue, profits and customer satisfaction. Functional strategies typically align with narrower functional objectives. IT, for example, aims to support the business and its Corporate level strategy, and also utilises technology to gain competitive advantages on the market.

IT strategy trends on the market

“The intelligent digital mesh is a foundation for future digital business and its ecosystems. To create competitive advantage, enterprise architecture and technology innovation leaders must evaluate these top trends to identify opportunities that their organizations can exploit” (Cearley et al., 2017). The top trends are seen to support the digital platform and business innovation.

Cearley recommends companies to examine their business impacts and adjust business models and operations, and these below mentioned trends are the ones that IT cannot afford to ignore (Cearley et al., 2017).

The top IT trends for 2018 defined by Gartner are:

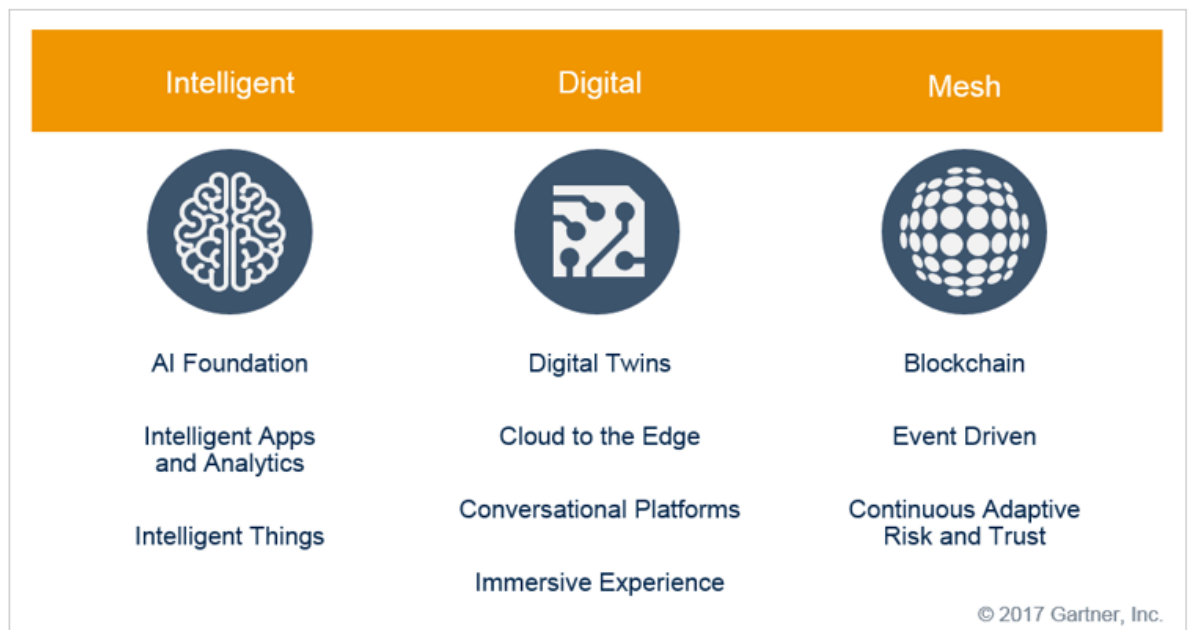


Figure 5: The top IT trends for 2018 (Cearley et al., 2017)

While these trends offer valuable information for analysis at the case company, it must be acknowledged that the case company is in such an early stage in its existence, that some level of prioritisation must be practised when considering including these trends in the IT strategy.

The AI foundation, Blockchain Technology and Immersive Experience (such as VR) are not relevant to the case company or its IT unit at this moment in time. It is good to understand the trends, but when determining the strategy these can be ignored in the initial stage.

However, understanding the benefits of intelligent applications and analytics is important, as augmented analytics will enable users to spend time on acting on insights rather than crunching numbers and trying to make sense of them.

In the partnership model of the case company, understanding especially the OEM partner's system landscape could offer benefits, such as the ability to link to the OEM's digital entity and becoming Digital twins.

In the case company, the initial thoughts are adopting a Cloud First approach and therefore the digital system selection is already in a good position. It will enable adaptation to more digitalisation in the form of intelligent things and integrations with third parties. Events will become more important in the intelligent digital mesh, which will set new type of requirements in the system monitoring operations (Cearley et al., 2017).

It must be understood that creating a whole new IT operative environment in the case company will carry a new type of risk for the business operations. Firstly the set up of new digital system is a risk in itself in IT, and secondly the adaptation could impose a risk to the business operations.

The question the IT unit should ask when evaluating the digital trends is how to identify, categorise and analyse the trends that will affect the organisation most, and then carefully plan how to implement them.

Blue Ocean strategy

Blue Ocean idea is based on the thought that benefits are generated through new ways of utilising existing assets. There does not need to be any new technological innovations, however the Blue Ocean strategy combined with Cloud First methodology has elements of both. Utilising Blue Ocean thinking in the Cloud environment opens opportunities in creating new ways of working, resulting in increased value, good profits and increase in brand equity (Kim and Mauborgne, 2004).

Thiel's vision supports the recognition of new opportunities, as covered earlier. This is what the case company's IT should aim for; creating an operating environment so radically new and efficient, with which competitors could not compete (Thiel, 2014).

The Blue Ocean strategy differs from traditional thinking in that in traditional model the boundaries are defined and accepted. This leaves very little room for agility. If the case company's IT unit adapts traditional ways of working, they are trying to compete with a lean organisation and modern tools but slow and bureaucratic processes against large competitors with out-dated tools and slow and bureaucratic processes. In this model the competition is lost.

Digitalisation

Balis, a Global Advisory Services Leader for Media & Entertainment at EY, takes a human approach by claiming that it is humans that make technology and thus it is humans the technology should serve (Balis, 2017). Digitalisation is an opportunity for creating new interfaces, enables, connections and accountability to better serve humans across the business.

In the case company, the adaptation of digital tools means adapting new ways of working. The transferred employees are used to working with a set of traditional IT tools at the Seller's and now they are faced with a transformation to digital system environment. Although not part of this research, the adaptation requires an advanced level of change management.

McDonald, a Managing Director at Accenture, on the other hand focuses on making a point of separating a Digital strategy from IT strategy. Digital strategy is a lot like IT strategy, a process of selecting which technologies to invest in, and this approach should result in a plan, but a digital strategy requires a different approach (McDonald, 2015).

There are two options for a Digital plan, the first one being a traditional system focused approach where digitalisation starts with digital tool selections and then spreads across organisations. The second option is the business transformation option, meaning what kind of impacts digitalisation would bring to the whole organisation, but the challenge is how to make the transformation a company-driven exercise instead of IT driven activity as the IT driven change has been noticed not to be very successful (McDonald, 2015).

In the case company, digitalisation is already recognised as being part of the Corporate level strategy. The CIO is involved in business planning and implementation, which will make the split between Digital strategy and IT strategy clear. Digital implementation is part of the company agenda and supported across the organisation, however IT will be the driving force in implementing it. Therefore, the Digital strategy is part of the Corporate strategy and it is embedded into the IT strategy.

Ways of operating

The case company's IT unit aims to build an agile working culture. The company's business model requires agility, the technology trends require quick adaptation and the employees need to have flexible ways of operating.

A fast agile company culture can be described the following way:

"While strong skills are crucial, companies can to some degree compensate for missing ones by infusing their traditional cultures with velocity, flexibility, an external orientation, and the ability to learn" (Catlin et al., 2015, p. 14).

There are many opportunities for learning new ways of working when the company employees are a mix of internal employees and external consultants.

Another remark from Catlin is the utilisation of DevOps, agility and continuous delivery cultures: "While there is more than one way to build such a culture, many companies with high scores on the Digital Quotient diagnostic have succeeded by adopting test-and-learn approaches drawn from software-development movements such as DevOps, continuous delivery, and agile. Once, these were confined to the periphery of the business environment. Now they bring a cooperative, collaborative disposition to interactions between talented workers at its core. Previously siloed functions, departments, and business units can learn a new spirit of cohesiveness" (Catlin et al., 2015, p.14).

Service Management model

Digitalisation is also changing the way the already established operations are managed in IT. ITIL is a set of practises for IT Service Management that focuses on aligning IT services with the needs of business (Wikipedia, 2018), while another model SIAM concentrates on multi-vendor operating environments. The challenge comes from choosing the right approach to the operations as the traditional models may not work as the expectations are different to that of the traditional system environment.

Service and operations management is a part of IT strategy. As the IT landscape does not yet exist, there is no legacy service management for the new systems and tools. This offers an opportunity for the case company to develop a suitable model. Although the service management model is not in the scope of this theses, it must be recognised that the service model creation is ultimately part of the IT strategy.

Strategy for a start-up company

The advantage of setting up a new business and IT operations is that big organisations can struggle to keep up with technological changes whilst start-ups can start from a clean table without the legacy burden. There are cutting-edge technologies available which can offer strategical benefits against the competitors; the case company should explore these.

While the focus must be on launching and securing the business, there should also be room for innovation. Failing fast has elements of DevOps methodology, where new ideas are tried out all the time, providing the business immediate benefits but also protecting the company from huge investment losses if the trials fail.

Start-up environments also have unique risks; hence the company should prepare for uncertain failure and have risk monitoring processes in place.

Best practises for strategy creation

The importance of an IT strategy has become more important over the past few years as organizations focus on digital transformation and thriving in the digital age. "Technology is essential for creating new business models, products and services; enhancing customer service as well as customer experiences; increasing sales; enabling workers and improving productivity; and supporting interactions with vendors and other business partners" Rouse et al., (2017).

IT Strategy creation typically starts with assessing the current technology in use in relation to the business requirements and identifying gaps. However, as the case company does not have a dependency to an existing IT environment, the assessment should start with understanding the business requirements and the Corporate strategy.

The challenge comes from choosing the correct technology to suit the business. There is not much time to carry out in-depth system evaluations and assessments and hence one option could be to utilise external parties such as consultancy companies to provide benchmarking information and user studies from the market.

Once the founding work is done, the IT Management need to start developing the objectives, budget projections, KPIs and vulnerability management practises for the strategy documentation.

The best practises for strategy levels and drivers have been outlined earlier in the research, and Chapter 5.2 demonstrates the usage of one such model.

The importance of communication

Functional level strategy can give the unit leaders empowerment, but the units should remain aligned. If the unit leaders focus only on their own unit level implementations and activities, it can result in isolation and dis-alignment from the Corporate strategy. This can be avoided by putting emphasis on communication, enabled by a proper governance model, helping especially in conflict situations.

A suitable strategy review framework model is needed both in the creation phase and afterwards as a part of the business cycle. With an official structure in place, the leaders can discuss and challenge the strategies, adjust them if required, and agree on the communication methods relating to Corporate and unit level strategies.

Kaplan and Norton (2008) propose the following meeting governance framework:

Management Meetings

	MEETING TYPE		
	Operational review	Strategy review	Strategy testing and adapting
Information requirements	Dashboards for key performance indicators; weekly and monthly financial summaries	Strategy map and balanced scorecard reports	Strategy map, balanced scorecard, ABC profitability reports, analytic studies of strategy, external and competitive analyses
Frequency	Daily, twice weekly, weekly, or monthly, depending on business cycle	Monthly	Annually (perhaps quarterly for fast-moving industries)
Attendees	Departmental and functional personnel; senior management for financial reviews	Senior management team, strategic theme owners, strategy management officer	Senior management team, strategic theme owners, functional and planning specialists, business unit heads
Focus	Identify and solve operational problems (sales declines, late deliveries, equipment downtime, supplier problems)	Implement strategy	Test and adapt strategy based on causal analytics, product-line and channel profitability, changing external environment, emergent strategies, and new technology developments
Goal	Respond to short-term problems and promote continuous improvements	Fine-tune strategy; make midcourse adaptations	Incrementally improve or transform strategy; establish strategic and operational plans; set strategic targets; authorize spending for strategic initiatives and other major discretionary expenditures

Figure 6. Management Meetings 101 (Kaplan and Norton 2008, p.73)

5 Strategy formation and implementation plan

This Chapter starts with the application of the theoretical concepts and horizons which were covered in Chapter 4. Next, the strategy drivers and business requirements are discussed before defining the Functional level IT strategy for the case company. The strategy implementation plan is designed after the strategy definition, and finally the KPI proposal, their implementation plan and review processes are covered.

Horizons

Horizon 1

The first horizon can be defined as the case company's establishment. The ability to operate requires registrations in the intended countries and locations. Understanding the target customer groups, acquiring new trade customers and establishing the sales channels will enable operations. Research and Development is needed for product generation immediately, and for future growth. The vendor and stakeholder partnerships and the business model implementation clarifies the roles of different parties in this complex setup. Ability to run marketing campaigns and execute product launches play a huge part, as does also the ability to invoice customers and receive incoming money.

The first horizon concerns a relative short time period in the case company's strategy, about six to twelve months, as the company is established almost from the scratch.

The schedule and pace set a lot of expectations to the IT department. In order to support the business in this initial phase requires the IT leaders to understand the business objectives, schedule, criticality of the activities and prioritisation of them, and only then the IT strategy can be created, considering the Corporate expectations.

The IT planning activities had started prior to the Business transaction closure, as on the day of the transaction all the IT support from the Seller stopped. The initial planning and implementation of the first systems had started already some months prior to the Deal closure, in which majority of the systems and tools transferred from the Seller to the Buyers.

The foremost requirement was to have the basics in place; infrastructure, laptops and IT support for the employees, and the tools, systems and applications to work with initially. At this point the decision for the Cloud First approach had already been made.

In addition to the above, there needed to be an understanding of what exactly the Seller was transferring to the buyers, and what was needed to be kept operative from the huge portfolio of tools. With this information it was possible to create a plan for the horizon 1 items specifically for IT.

IT's functional strategy should also include smart system selections during horizon 1. The system selections support the company initially in the setup phase, but they have to be scalable and support the business also in the future, in horizons 2 and 3. Careful planning and consideration was needed.

Horizon 2

The second horizon for the case company is about building new and emerging businesses. The start-up nature of the business means that the focus is mostly on horizon 1. While the horizon 1 actions are being implemented, such as securing the business launch and enabling long term opportunities for the business in general, there need to be actions already in the pipeline for the next steps, horizon 2.

Research and Development takes time and the complex organisation setup means involving many stakeholders along the way. There is a strong dependency to the outcome of horizon 1 success, for if the initial business launch fails there will be no need for horizon 2 and 3 activities. The planning should include an element of fast failure, the ability to have agile ways of working and changing direction quickly in case something fails. The initial product sales will show the direction for the market trends and what the bestsellers and revenue generating products are. For the business this horizon means monitoring the horizon 1 activities closely, and at the same time planning to enter new market areas, defining new business models, and possibly also forming new partnerships.

For IT the horizon 2 is challenging in that there needs to be the same agility to switch the course of direction as the business has. New product launches are not seen as a huge change but shipping them from different locations would require setting up the system configurations. Entering new market areas requires many months of work as processes such as finances, distribution and local reporting are rather slow to set up.

For this reason, it is again important for IT to work together with business to stay aligned.

IT's functional strategy should include the business support elements, but also IT's desire to create an agile and flexible way of operations. At this point it is advisable for IT to check how the implemented systems are supporting the business processes; does something need reconfiguring, are there ways to improve the process setup, can there be cost saving opportunities identified.

Building IT partnerships with the selected vendors should also be an area of re-visiting.

Horizon 3

While the first and second horizon activities are ongoing, in parallel a lot of investment needs to be put into future research and development; this is the core of horizon three. In the technology business it is important to stay ahead of the game and investigate trends and new opportunities as it can sometimes take years to innovate and build something new or to fit new emerging technologies into the existing products.

The case company's direction is outlined above with the first two horizons and it is clear the main objective is to gain market share and then to grow and expand the business. Again, there is a dependency to the success of the previous horizons. If the immediate business launch fails, there will be no investment capacity for building new businesses nor funding for researching new opportunities for the future. However, strategies require long term planning for the years to come and this is perhaps best characterized as the optimistic look on the business.

IT should embed the same logic in its strategy design. The third horizon should concern new ways of doing things, new innovations and utilisation of existing and emerging technologies.

Direction

The second uniting view of strategies is that they provide direction for the activities. Often, managers and entrepreneurs try to set the direction according to the company's long-term objectives. With the three horizons clearly considered, documented, communicated and monitored, the direction for the company will start to form. The elements of what, how, when, who and where set a more practical direction for the strategy building.

The position of IT in the organisation defines how close to the planning, decision making, and their implementations IT is. The direction of the case company sets requirements for IT but at the same time IT can be positioned to impact the company direction with technology related recommendations.

The traditional centralised IT departments may not be able to offer much to the business, but the digitalisation and the availability of modern technology options can be beneficial. Many ideas can be initiated by IT and the options for data collection and the availability and utilisation of big data can be an opportunity of investigation for many companies.

Digitalisation plays a big role in today's business environment. In building an IT strategy, success is seen to depend on the ability to invest in relevant digital capabilities that are well aligned with strategy – and to do so at scale. The right capabilities help companies keep pace with their customers as digitalisation transforms the way they research and consider products and services, interact, and make purchases on the digital consumer decision journey (Catlin, 2015, p.9).

In the case company, the selection of a CRM system can in the best case offer competitive advantage. Compared to other systems which are necessities, such as ERP or HRIS, the CRM system can generate valuable information about the customers, offering the company benefits on the long term, such as identifying new customer target groups.

It is also beneficial for the case company to create such a unique operating environment, in this context in IT, which will be difficult for the competitors to copy. This will become an advantage for the company. The unique decisions made in the IT setup phase, including the system selections, ways of operating and the functional IT specific strategy, will provide long term benefits for the case company.

Organization

The Organisation aspect is perhaps the most challenging focus area for the case company as it concerns setting up a new business model in this type of industry altogether and engaging people in various roles within the company and outside it.

Majority of the case company's personnel consist of transferred employees from the Seller to the case company and the OEM's subsidiary. The internal workforce is therefore a combination of sales and marketing and support functions personnel, and they form a majority of the internal workforce, about 95%. The rest of the internal employees, ~ 5%, have their background in other companies or industries. The benefit of having such a large workforce with the Seller's background is the competence for the business setup stage; the employees are familiar with the business operations and they can continue in their roles almost without disruption. However, the challenge is adapting to the new business model, where manufacturing is outsourced and the company culture is shaping. There will be new business processes, systems and tools and a network of contacts, some of which are in a separate company. This aspect requires change management.

The challenge comes from having a close partnership with the OEM's subsidiary. The case company's and the subsidiary's employee ratio is about 19:1, respectively, however the case company's culture pulls strongly towards the minority employee group. This may leave the partner's subsidiary employees feel left out or treated differently from the case company's employees, as the expectations and work regulations are different – yet the employees are expected to work in joint office spaces on the same or similar activities.

Therefore, building and communicating the company direction and the overall Corporate strategy to the employees is very important so that both the case company's employees and the manufacturing partner's employees feel that they have the same objectives.

In addition, there are numbers of external employee groups; the partners, customers and other stakeholders whose relationships need setting up and looked after. Majority of these relationships are new. Two of the new partners – the brand provider and manufacturing partner – are new and the contacts and stakeholders are fresh. The customer base is mostly the same to the internal stakeholders, however the new business model and the processes are new to everyone.

For IT, this setup sets expectations too, such as working with new partners, tools and processes. Some of them are of the nature where IT needs to drive relationship building or establishing tools for information exchange. Others require adaptation to the partners' already established system environments. Regarding data exchange between partners' information systems, integrations need to be built which requires close collaboration with the correct contact partners. Both parties need to invest in easy-to-connect-to systems with an aim to become digital twins.

The challenges at the early stage are establishing the contacts and the ways of working with new partners. From IT this requires a clear IT strategy and agreed governance models with the stakeholders. To start with these rules can be agreed with the stakeholders separately but with time they would be beneficial to be aligned as part of service management setup.

5.1 IT strategy drivers and requirements

Following the launch of Corporate level strategy, the unit leaders started preparing functional level strategies. The objectives of the new business determined the timescale and requirements for the units, including IT. The schedule and the review points needed to be agreed in advance in order to align the unit strategies.

Business support

The business was being launched. The business model was new and there were product launches ahead. At this point, it was unclear how the markets would react to the products and whether the business model was going to be successful. IT support for this type of environment required close collaboration with the Business Leaders as well as carefully selected ways of working.

It was also anticipated that many of the elements in the business model would potentially change depending on how the products were appreciated by the customers and media. Agility and flexibility from all units, including IT, was needed. Similarly, long commitment contracts to vendors, partners and technology choices was not possible.

The expectation to IT was to drive the establishment of new systems and tools in timely manner, considering the product launch schedules. This required planning and prioritisation of the system landscape build.

Predictability

The way IT is expected to support the business brought in a need for a certain level of predictability, which in turn required governance models and agreed ways of working.

Firstly, IT as a unit needs to be predictable and communicative towards Business stakeholders. Mutual transparency is needed for this to succeed. Secondly, the technology choices need to be solid and offer capabilities for business analysis.

Management reporting systems produce historical data for future decision making, planning systems have capabilities to support for example sales planning and budgeting, and for building different business scenarios. Analytic tools provide possibilities for trend analysis. All these capabilities and many others are necessary for providing predictability to the business.

Reliability

The reliability of systems and solutions is a fundamental part of the IT offering and thus also the IT strategy. The case company's IT unit had already selected Cloud First approach, meaning that the company did not want to own and maintain its own infrastructure, systems and applications – instead everything would be purchased as service. In this model, the data governance and hosting sit with the vendors, who are responsible for ensuring the systems are always available.

The IT personnel on the other hand needed to select systems which were known to be reliable and bug-free. IT's role is typically to support the business with tools, for the business stakeholders may not have information or competences for selecting reliable software or hardware. Therefore, the IT department needed to consider the system reliability in their strategy.

Scalability

When setting up a whole new system architecture and ramping up new tools, an important consideration is to refrain from building something too big or complex. The case company was launching a new business and the risk element of the profitability was there from the start. The decisions on what to implement and in which time frame were considered extremely important. The new business was going to be ramped up with simplified legacy tools and in parallel, new systems were being implemented, resulting in a transition period and switch from legacy to new systems.

The implementation of new systems in this kind of situation is typically done in phases, giving the business benefits at low cost as quickly as possible. The sales figures and case company's profitability would be followed closely but only be available as an annual report after the first year, and therefore the IT strategy needed to include risk management and consideration on what to commit to.

As for most companies, the aim for the business is to grow and laying down the first elements of the new system environment needed to be smart for enabling growth. The selected systems needed to be scalable to support increasing transaction volumes, they needed to be able to support larger number of users and expansion to new geographical areas.

Cost structure

Cloud First approach was selected for the ease of maintenance, but also for the short commitment times and smaller investment requirement. Digitalization has brought enormous changes in IT worldwide and large capital investments in IT systems are no longer necessarily needed. Instead the availability of Cloud based systems have changed the cost from capital expenditure to operating expense, which has an impact to company balance sheets.

Cloud environment and the service model need a light governance model. The case company's IT unit had approximately 20 internal employees and the desire was to utilize external workforce for specialist skills, especially during the project work. The internal workforce therefore had a

role of steering the work and decision making, which differs from the typical technical work traditionally carried out by IT.

IT as a company asset

The idea of creating a unit level strategy for IT arises from several reasons.

The Digital Age has brought with it a realisation that not only the company tools and systems need to be digitalised, but instead everything around us in companies and outside are connected. IT is an enabler to the business, and through DevOps there are opportunities to discover new options – IT and Business together.

In the traditional model CIOs typically reported to the CFO but currently the CIOs or CDOs report directly to the CEO. In this setup, the CIO or CDO is part of decision making and lifted to the same level as the rest of the Leadership Team. The role of IT is no longer seen only as a provider of connection and tools, but also as an enabler for other units such as marketing, R&D, sales, operations and HR.

IT's main function is to provide support to the organisation through arrangement of collaboration tools and data connections, but IT can also be seen as an asset. The case company's target is to create such a powerful IT unit that the way it operates will become an asset.

5.2 Definition of the Functional IT strategy

Strategy definition follows certain decisions. Whether to take into use an existing strategy, create something from the scratch, or pick elements of different existing models and create a custom-made strategy, are considerations the unit level leaders need to go through.

A strong IT strategy provides a blueprint of how technology supports and shapes the organization's overall business strategy.

There are many types of strategy concepts and models available as covered in Chapter 4, but to find an already existing strategy perfectly suitable for the case company is challenging. Also, strategies serve their purpose best when they are purposely made, as only the Leadership of the company know what they want to achieve, when and how.

The strategy creation process can still follow certain steps. There needs to be a vision and mission for IT unit's existence. Defining the objectives and creating ways to achieve them follow next, which form the base for the strategy statement. After the strategy statement is clear the implementation planning starts. KPI definitions are the last step. This is illustrated in Figure 6 below.

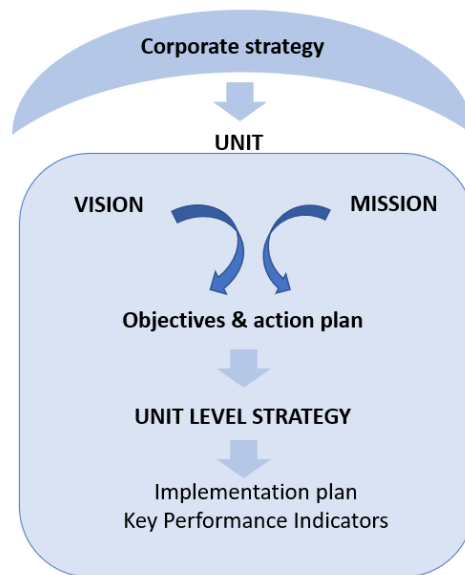


Figure 7. Unit level strategy creation process in the case company

The strategy, when operative, should be reviewed and adjusted regularly. This can be achieved by implementing a governance model where communication with the top management, other unit leads and relevant stakeholders is at the centre.

Vision

The mission and vision provide the guidance based on which the strategy is created. These are initially set at the Corporate level; however the unit level strategies should have them also.

Information from micro and macro surroundings helps fulfil company targets. The company analyses the macro environment to determine the Corporate strategy. It is important for the IT unit to understand the company direction, as it will shape the IT mission and strategy.

In the case company's IT unit the vision is to become a reliable business partner: IT wants to be agile, reliable and cost-efficient partner for the business, proactively driving and innovating new solutions and services for the global clientele and internal operations.

IT Strategy statement

The case company IT unit should have an evolutionary role in the case company. This means starting from the basic IT team and system environment setup, and extending the capabilities gradually as new business requirements emerge. The IT operations are dependent on the Corporate activities and direction, hence it is important that the CIO is part of the company Leadership.

Horizon 1 – foundation

Initially, during the first year and a half, IT needs to create the basis for the business, meaning building the core IT capabilities, IT strategy and enterprise level architecture roadmap.

Horizon 2 - facilitation

During the second phase IT support is needed in enabling new business models, cover wider geographical areas and support more complex business scenarios. Additionally, the IT operating model should be further developed to support the activities, such as end to end processes and collaboration with other functions. During this stage IT should also start investigating automation such as robotics and other emerging technologies. This stage is estimated to last approximately one year.

Horizon 3 - innovation

The long term objective is to leverage modern technologies (AI, machine learning, robotics, analytics etc.) and IT enabled capabilities (big data, APIs, ecosystem collaboration etc) to innovate new business models and opportunities for the case company. The IT unit aims to keep the case company on the cutting edge of utilising emerging technology.

These horizons are illustrated in Figure 7.

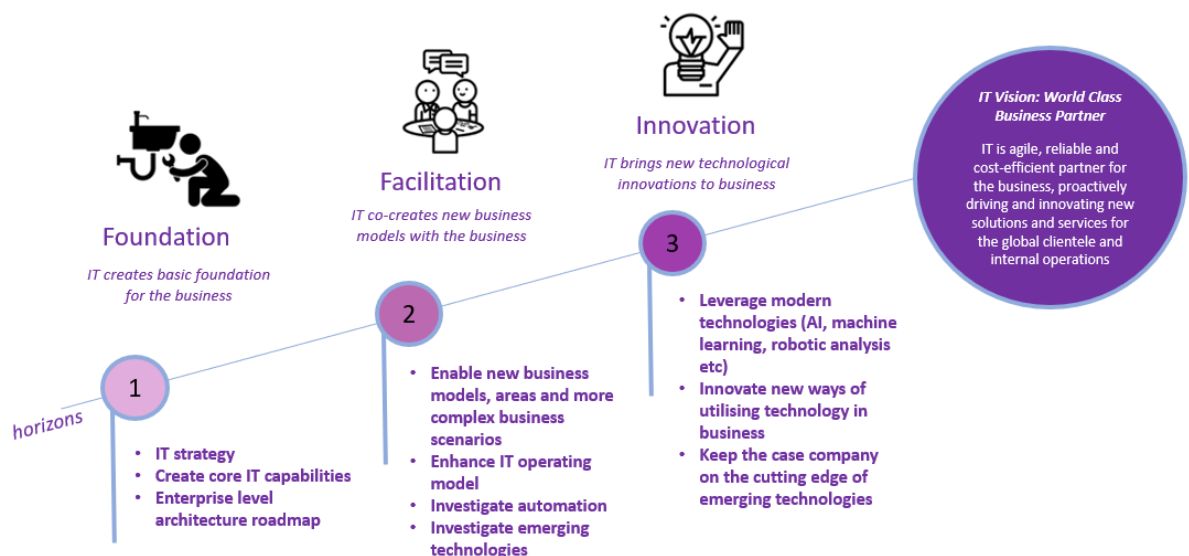


Figure 8. Case company application of the three horizons

IT's strategy statement therefore is to further increase its business relevance over time.

5.3 Implementation plan

The unit strategy implementation plans are made once the strategy statements are approved by the top management and board. At this point it is necessary to ensure that all the unit level strategies are aligned to the Corporate strategy and agree at what intervals they should be reviewed. It is then the unit leaders' responsibility to proceed with the implementation plan, including a communication plan preparation.

In the case company, the implementation planning started with SWOT analysis as it was necessary to understand what was needed in the IT unit to carry out the strategy, in other words what the strengths, weaknesses, opportunities and threats were.



Figure 9. SWOT analysis

The SWOT analysis highlights the need for the internal employees' important role in the strategy governance; they are the executors of the strategy and accountable for overseeing the work of external consultants. It is therefore vital to communicate the strategy to the IT employees thoroughly.

The threats are company-wide and strong leadership is needed to tackle the threats. The Corporate strategy roll-out requires special attention. The opportunities of IT will enable long term strategical planning, reaching out to horizon 3.

The implementation planning can follow certain practises, as illustrated in Figure 10 below.

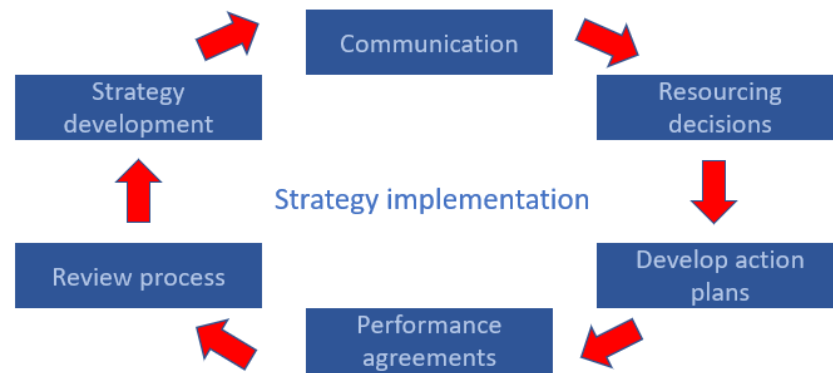


Figure 10. Strategy implementation process

Understanding the strategy objectives and the results of the SWOT analysis enables the next steps in the implementation: strategy communication planning, decision making relating to resourcing, action plans, performance management and review processes.

Communication plan

The main purpose of internal communication is satisfying the information needs of all the people in the company. Communication is needed to raise awareness, understanding, commitment and eventually ownership of the activities. The internal communication process also influences the building of mutual relationships and networks within the company. Firstly, employees need basic information for managing their daily work and secondly, information of the company strategy and targets will help in motivating and engaging the employees.

At the unit level, communication is needed to ensure that the most powerful influencers (IT unit employees) fully understand the IT objectives, benefits and status, as they are proactively sponsoring and supporting the implementation and activities.

Creation of the IT strategy should involve the IT Management Team and hence it is expected that they are aware of the purpose of the strategy. However, it is important to go it through so many times that everyone has the same understanding. The CIO should then communicate the strategy to all IT employees through several channels: face to face or video conference depending on location of the employees, via collaboration tools such as email, and he also needs to ensure everyone has access to the material.

The IT communication goal is to ensure that there is a common understanding about the strategy and its objectives:

- IT unit functional strategy and objectives
- How the IT functional strategy links to the Corporate strategy
- How the functional strategy impacts the way IT unit functions

- How the strategical targets are defined and monitored
- What the Key Performance Indicators (KPIs) relating to the IT strategy are
- How the KPIs for the foundation for individual level objectives

The communication plan should follow the schedule as demonstrated in Figure 11.

Resourcing

The IT Management team members are responsible for ensuring that their team members understand the strategy as it is intended to be understood. This can be further confirmed in team meetings and one to one sessions. All the IT employees are accountable for working towards the same goals and understanding what the objectives are, hence it is recommended that the strategical elements are built into the employee objective setting and performance management processes.

The IT employees are also accountable for ensuring that the external employees, such as consultants, partners and vendors are aware of the unit level strategy to the extent they need to be to provide services to the case company. In addition, there are other stakeholders who might require information about the IT strategy, and they can be educated as needed.

Action plan and performance agreements

Action plans are often linked to individual objectives, which are part of the organisation performance management process. Balanced scorecards are typically used as strategy performance tools, they provide management an opportunity to follow how well the strategy objectives are being executed and met. Balanced scorecards are not covered in this research, however KPIs and their utilisation as strategy performance monitoring methods are covered in the next section.

Review process

The strategy performance needs to be monitored and reviewed regularly. An example of the review process was presented in Chapter 4 (Figure 6), and the proposal for the case company is to generate similar review cycle:

	Meeting type		
	Operational review	Strategy review	Strategy testing & adapting
Info requirement	Dashboards of KPIs, budget summary	Strategy progress reports based on KPIs	Functional strategy progress reviews
Frequency	Monthly	Quarterly	Annually (November)
Attendees	IT unit leaders & IT Controller	IT unit leaders	Top leadership
Focus	Identify and solve problems, align activities	Adjust unit strategy	Analyse unit and Corporate strategies, adjust according to needs
Goal	Respond to short-term operative problems, promote continuous improvements	Fine tune strategy, make midcourse adaptations	Improve or transform Corporate strategy, adjust and align unit strategies accordingly

Figure 11. Strategy review cycle

5.4 Key performance indicators

Key performance indicators are quantifiable measures for companies to use to determine how well they meet the set operational and strategic goals. They are metrics that are the most important indicators of the current performance level of the unit or company in achieving their targets, and they form an important part of the information required to determine and explain how a company progresses towards its goals. The indicators are linked to the company's strategic goals. They provide guidance to business and assist in understanding the current situation of the company and addressing possible problems.

The KPIs are quantitative, in that they have to be measurable. They also need to be practical and integrate well with the company processes. The KPIs must be based on data and provide context that is aligned to the business targets. It is also necessary to be able to follow-up on the activities at pre-defined checkpoints.

Key performance indicators are important to a business because they help it focus on common goals and ensure those goals stay aligned within the organization. They measure performance and alignment to the intended activities.

Often KPIs are used in performance and talent management, as by setting individual targets employees have clarity on what is expected. KPIs are also a way to monitor the progress of the individual objectives. The individual objectives can also be set so that several individuals' objectives are interlinked, which ensures the activities within specific units and also across units are aligned.

The KPIs of the case company's IT unit are based both on Corporate level strategy and KPIs, and the IT unit's strategy. At Corporate level, the KPIs are communicated to the Leaders and strained down to the units. At the unit level they are then interpreted to unit level KPIs.

KPI 1

The IT unit needs to build a modern and light IT team and partner with innovative IT companies.

The timeline for this first objective is one year, however the success of this performance indicator is to establish the rights partnerships from the start. There may also be partners which are needed only in the ramp-up phase. Setting up the IT department includes talent recruitment and onboarding, setting up the IT governance model and unified leadership.

KPI 2

The foremost corporate level KPI is the business launch and the business processes for the new business model. In IT, this translates to securing the business launch by implementing a Cloud based system environment.

This objective includes implementing the basic applications which are needed for running the business. The business target is to market, sell and distribute devices and IT needs to assess technology that is needed to support these activities. Typically, core applications include Sales and Marketing applications, Enterprise Resource Planning system and HCM system, and some level of reporting and analytics capabilities, unless they are built into the other systems.

The timeline for this IT specific KPI is six months; it is set on the corporate level and it is tightly linked to product launches, this it is not possible for IT to impact the schedule so prioritisation of what will be the first implementations is needed.

KPI 3

Another Corporate level KPI is to obtain customer data and to gain competitive advantages through the usage of analytics and big data. For IT this means building CRM capabilities and improving channel visibility through technology, and making them competitive advantages for the case company. The schedule is one year for the data to be meaningful.

KPI 4

The fourth KPI is to establish an efficient cost monitoring process within IT, and to follow the set budget. This KPI is checked monthly but evaluated fully at the end of the budget year. It is also linked to the Corporate level KPI, which is the company budget and its monitoring. The company

budget is allocated in portions to the different business units, each unit then being responsible for their own spend.

KPI implementation plan

During the strategy planning the KPIs are also discussed amongst the IT management team members. Once the KPIs are defined each of the IT management team members converts the KPIs into individual level objectives for their team members, which the CIO approves prior to communicating them. The individual level targets further clarify the objectives of IT to the individuals and embedded into the performance management process allow the management a valuable leadership tool.

The KPI implementation plan is therefore part of the performance management process, which should follow an annual pre-described cycle, as illustrated below in Figure 12. The objectives are often tied to incentive management, and in the case company it is recommended this is also the case.

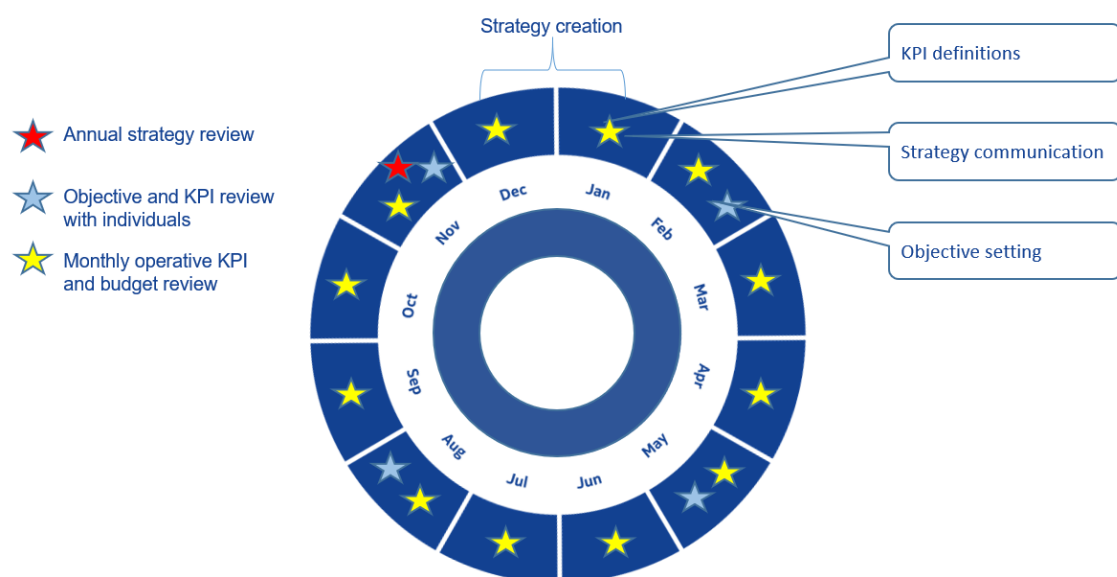


Figure 12. Strategy, KPI and objective annual cycle

Figure 12 illustrates the initial strategy creation during December 2016 – January 2017, and also the annual strategy review in November. As suggested above, the unit strategy review should take place quarterly. During the annual Corporate strategy review the strategy is changed and

adjusted if needed and the unit strategies are again aligned to the the Corporate strategy. Thus, the strategy should be flexible enough to allow adjustments during the reviews.

6 Conclusions and next steps

This research has covered elements in the challenging and changing environment in which the case company operates. There are both external and internal factors setting requirements for the case company's IT unit.

In order for any company to survive in competitive environment requires agility, as the exponential growth of digital technologies requires companies to adapt to fast changing surroundings. The implementation of a Cloud based IT environment enables the case company to be digitally able, and to respond to changes quickly.

The necessity for the case company's Functional IT strategy creation today will build a foundation on top of which future growth can be planned. The ability start building a unit IT strategy from a clean table for a global company is quite rare and the models and ideas presented in this research will offer certain considerations and flexibility for the future.

The case company will be in a position to be an early adapter of new emerging technologies. This requires awareness of the market trends and involvement in technology development, including technology partnerships. With the Functional IT strategy implemented, keeping up with the new trends requires superior planning, governance and leadership as being technologically advanced and trying out new solutions also comes with a higher possibility of risk, than operating in a traditional IT environment. Although risk management was excluded from this research, it is an important element in both Corporate and functional strategies. The risks should be assessed regularly, and the recommendation is for the case company IT unit to consider building processes for that purpose.

While the external trends set requirements to the case company, the fast changing business environment will also impact the business and the Corporate strategy. This leads to continuous flow of internal requirements for IT. The monitoring and governance practises offered in Chapter 5 enable the case company to remain grounded in decision making. It requires top leadership involvement and collaboration between different units. Introducing Balanced Scorecards across the organisation is another recommendation for going forward, as they offer structured approach to strategy implementation and monitoring.

Fast pace of change in the case company is recognised as being a big challenge and possibly also a risk for the implementation of operations. Without proper change management practises the risks could turn into huge problems. Proper change management practises are therefore also suggested.

With the strategy defined and implementation plans ready, it is important for the top leadership to emphasize the importance of the strategy to the whole organisation. It is not enough to communicate it once but the direction for the operations need to be present every day.

“Once companies have arrived at a clearly thought-out strategy, they must commit themselves to it wholeheartedly. The days of tinkering at the edges are gone” (Catlin, 2015, p.12)

7 References

Balis, J. (2017, October). *Why is the best digital strategy a human one*. EY Consulting.

[Online] Available from <https://consulting.ey.com/best-digital-strategy-human/>

[Accessed 12th April 2018].

Catlin, T., Scanlan, J. and Willmott, P. (2015, December). *Raising your digital quotient*. McKinsey&Company.

Cearley, D.W., Burke B., Searle, S. and Walker M.J. (2017, October). *Top 10 Strategic Trends for 2018*. Gartner. [Online] Available from <https://www.gartner.com/doc/3811368?srclid=1-6595640781> [Accessed 15th April 2018].

Duoff, Neil. (2014, April). *Understanding Drivers and Outcomes. Strategies*. [Online] Available from <https://strategies.com/understanding-drivers-and-outcomes/> [Accessed 15th April 2018].

Johnson, G. et al. (2013, 3rd edition). *Fundamentals of Strategy*. Pearson.

Kaplan, R.S. and Norton, D.P. (2008). *MASTERING the Management System*. Harvard Business Review.

Kim, W.C., & Mauborgne, R. (2004, October). *Blue Ocean Strategy*. Harvard Business Review.

McDonald, M. (2015, March). *What is a Digital strategy?* Accenture. [Online] Available from <https://www.accenture.com/us-en/blogs/blogs-digital-what-is-digital-strategy> [Accessed 25th April 2018].

Oxford University Press (2018). *Oxford Living Dictionaries*. [Online] Available from <https://en.oxforddictionaries.com/definition/strategy>. [Accessed 15th April 2018].

Rouse, M., Lebeaux, R. and Pratt, M.K. (2017, November). *IT strategy (information technology strategy)*. TechTarget. [Online] Available from <https://searchcio.techtarget.com/definition/IT-strategy-information-technology-strategy> [Accessed 25th April 2018].

Sun Tzu, (1988). *The Art of War*. Shambhala.

Thiel, P. (2014). *Zero to One*. Virgin books.

Wikipedia (2018). [Online] Available from <https://en.wikipedia.org/wiki/ITIL>. [Accessed 25th April 2018].